Hurricane Harvey-Texas

ESF-10

Situation Report #6

Subject: SITREP #5
To: Agency Leads

Thru: Matthew Loesel. PSC From: Unified Command

Date: 9/4/2017 **Reporting Period:** 9/4/2017

1. Introduction

1.1. Background

Hurricane Harvey made landfall at 2300 ET, August 26th, as a Category 4 storm near Rockport, Texas. Harvey stalled over southeastern TX. Due to its slow motion and a prolonged period of onshore flow, the impacted areas received more than 50 inches of precipitation which subsequently led to catastrophic flooding.

An ESF-10 Mission Assignment was signed on August 28, 2017. The US Environmental Protection Agency (EPA), Texas Commission on the Environmental Quality (TCEQ), Texas General Land Office (TGLO) and the US Coast Guard (USCG) have entered into Unified Command to begin the evaluation, clean-up and recovery of spills, releases and orphan containers.

2. Current Activities

2.1. Operations Section

On September 4, 2017, the Unified Command continued operations in accordance with the Natural Disaster Operational Workgroup (NDOW) Standard Operating Procedures, NDOW forms and Response Manager. The Unified Command is supported by three operational branches: Alpha Branch in Corpus Christi, Bravo Branch in Houston and Charlie Branch in Port Arthur.

Unified Command within each branch from the past operational period are continuing to evaluated, the focus changes from assessment to recovery. Several additional Oil Recovery and Container Recovery teams were added throughout Alpha and Bravo Branches.

The Charlie Branch is currently operating with five Oil Discharge Assessment Teams.

Table 1 displays the teams which were deployed in Alpha, Bravo and Charlie Branches during this operational period:

Table 1: Quantity and Types of Teams Deployed 9/4/17

Team Type	Alpha Branch	Bravo Branch	Charlie Branch
Water Assessment Teams	1	10	0
Hazard Evaluation	1	21	3
Oil Discharge Assessment	2	3	5
Container Recovery	2	0	0
Oil Recovery Group	3	0	0
ER/Recovery Group	3	1	0
Arkema Group	0	1	0
Air Operations Group	0	2	0
Totals	9	38	8

Bravo Branch completed site assessments at 24 public water systems and 14 wastewater treatment facilities. That information is not shown in the table below as the data was not entered into Response Manager when the report was sent. Two EPA contractors are mobilizing to Houston to ensure timely data entry.

	# of Facilities Assessed		
Status Detail	Alpha 9/4/17	Bravo 9/4/17	Cumulative
No problems	0	0	<mark>3</mark>
Lifted BWN due to negative BacT	_	_	_
samples. Normal operations resumed	0	0	<mark>0</mark>
System destroyed	0	0	0
On generator – never lost pressure	0	0	<mark>5</mark>
On generator – lost pressure	0	0	<mark>9</mark>
Lost pressure & or Treatment	<u>1</u>	0	<mark>6</mark>
BacT sample results pending	<mark>0</mark>	<mark>0</mark>	<mark>2</mark>
Lost Power – maintaining pressure	0	0	0
Not Operating	0	0	8
Site visit needed	0	0	0
Out of Contact	0	0	1
Contact Pending	0	0	

The phone bank in Austin, consisting of EPA and TCEQ personnel continue contacting drinking water and waste water facilities by phone.

Table 2: Drinking Water Facilities Contacted and Current Status

Status Detail	# of Contacts on 9/4/17	Cumulative*
No problems	<mark>174</mark>	<mark>2085</mark>
Lifted BWN due to negative BacT samples. Normal operations resumed	<mark>7</mark>	<mark>110</mark>
System destroyed	<mark>1</mark>	<mark>4</mark>
On generator – never lost pressure	0	<mark>24</mark>
On generator – lost pressure	<mark>2</mark>	<mark>24</mark>
Lost pressure & or Treatment	<mark>12</mark>	<mark>80</mark>
BacT sample results pending	<mark>10</mark>	<mark>62</mark>
Lost Power – maintaining pressure	0	<mark>1</mark>
Not Operating	<mark>6</mark>	<mark>44</mark>
Site visit needed	<mark>1</mark>	<mark>5</mark>
Out of Contact	0	<mark>195</mark>
Contact Pending	<mark>34</mark>	<mark>120</mark>
Totals	<mark>247</mark>	<mark>2754</mark>

^{*}Cumulative counts all calls made where the status of the call was that found in the Status Detail field.

Table 3: Waste Water Facilities Contacted and Current Status

Status Detail	# of Contacts on 9/4/17	Cumulative*
No Problems	<mark>54</mark>	<mark>1837</mark>
System Destroyed	<mark>0</mark>	<mark>2</mark>
WWTP and/or Collection on Generator or bypass pumps for LS	3	<mark>34</mark>
WWTP and/or Collection Partially Operational SSO	4	<mark>56</mark>
WWTP and/or Collection non operatonal no SSO	1	<mark>11</mark>
Site Visit Needed	0	0
Out of Contact - phone eval only	0	<mark>14</mark>
Contact Pending - Phone eval only	<mark>27</mark>	<mark>1107</mark>
Totals	<mark>89</mark>	<mark>3061</mark>

^{*}Cumulative counts all calls made where the status of the call was that found in the Status Detail field.

Table 4: Daily/Cumulative Summary of Hazard Evaluations/Recovery

				-	
Chahua	Op	<mark>oened</mark>	Closed		
<u>Status</u>	<mark>9/4/2017</mark>	Cumulative	<mark>9/4/2017</mark>	Cumulative	
Alpha Branch	<mark>6</mark>	<mark>43</mark>	<mark>11</mark>	<mark>50</mark>	
Bravo Branch	<mark>26</mark>	<mark>94</mark>	<mark>7</mark>	<mark>10</mark>	
NRC Reports	0	<mark>3</mark>	<mark>0</mark>	<mark>0</mark>	

Note: Open means the target is yet to be recovered. Closed means the target was recovered/left in place or access was denied to collect the item.

Table 5: Daily/Cumulative Summary of Spills/Discharges

Chahus	Оре	<mark>ened</mark>	Closed	
Status	<mark>9/4/2017</mark>	Cumulative	<mark>9/4/2017</mark>	Cumulative
Alpha Branch	<mark>9</mark>	<mark>339</mark>	<mark>2</mark>	<mark>28</mark>
Bravo Branch	<mark>0</mark>	<mark>30</mark>	<mark>2</mark>	<mark>3</mark>
NRC Reports	<mark>2</mark>	<mark>21</mark>	0	<mark>7</mark>

Note: Open means the target is yet to be recovered. Closed means the target was recovered/left in place or access was denied to collect the item.

2.2. Other Notable Activities

AUSTIN BRANCH

The phone bank contacted phone surveys almost all assigned drinking water and wastewater facilities to conduct an initial damage assessment. They have completed applicable survey forms for each water or wastewater system and entered the data into Response Manger. They continue to coordinate with TCEQ.

ALPHA BRANCH

Alpha Branch personnel completed pre-sampling and fencing larger staging pads, Recovered an additional seven drums and three cylinders. In the city of Rockport, Water Assessment Teams assessed an elevated tank. City engineers recommended that the city drain the tank and disassemble it due to strut damage. In Holiday Beach, a Water Assessment Team met with the water system operator and board members to discuss concerns and issues. The water system operator stated that more parts are needed for repairs of the distribution but all current leaks have been fixed. An additional skid steer and boat was mobilized to geographic areas in Alpha Branch. Personnel continue reviewing the backlog list of NRC reports compared to Response Manager target. Oversite of Signet Enterprise fuel transfer continued. 20,000 gallons have been transferred to date.

Orphan Container Recovery Teams in Alpha Branch continued reviewing open targets. Dialog with the data team and branch director on the system to close out open facility spill assessment targets continued. New and existing NRC Reports were reviewed for response candidates. Contact was initiated with Port Aransas WWTP regarding disposal of non-hazardous wastewater. Conoco Phillips was contacted regarding NRC report 1188749 to get an update. The report indicated the potential for a large spill but nothing has developed.

- Pre-sampling of staging area pads was completed with a total of 14 soil samples taken.
- A total of 86 orphan containers have been collected at the Alpha Branch staging area.

		CONTAINE	RS		TOTALS		
DATE	Drums [55gal]	Small Containers [< 55gal]	Large Containers [> 55gal]	Cylinders	Total Items Collected Today	Total Items Collected Project to Date	
9/1/2017	26	22	1	1	49	49	
9/2/2017	6	10	1		17	66	
9/3/2017	7			3	7	73	
9/4/2017	10		3	1	13	86	

- On Monday September 4, 2017 at 0900, EPA and the USCG provided oversight operations at Aransas Pass. The Oil Discharge Assessment Group (ODA) 1 continued to monitor oil removal operations on the Signet Enterprise. The Signet Enterprise commenced removal operations on the second FRAK truck. The second FRAK truck has approximately 25,000 gallons of diesel onboard. Thus far, 20,000 gallons of diesel has been removed and 280,000 gallons remains.
- On Monday September 4, 2017 at 1019 in Port Aransas, the ODA 1 monitored the Drill Ship DPSDS1 as it was successfully free floated with no issues or pollution observed. The Drill Ship DPSDS1 is currently enroute to Sherwin Alumina dock.
- The Alpha Branch's Hazard Evaluation transitioned from two teams to one team. The Oil Discharge Assessment Group transitioned from three teams to two teams. The Oil Discharge Recovery Group transitioned from two teams to three.
- Continued managing staging area pad (ERRS)
- Recovered 10 drums, 3 tanks greater than 55 gallons, and 1 cylinder closing a total of 7 targets from Response Manager (ERRS, EPA, TCEQ)
- Mobilized one boat in preparation of water recovery operations (ERRS)
- Continue reviewing backlog list of NRC reports compared to Response Manager targets (EPA)
- Continued oversite of fuel transfers of Signet Enterprise- 20, 000 gallons to date (USCG and TGLO)
- TCEQ operations were turned back over to TCEQ regional office

•

BRAVO BRANCH

Hazard Evaluation Team One: departed the ICP to Port Aransas to begin hazard evaluation. No hazardous materials were observed. One empty drum was found near Beach Access Road 3. Hazardous Evaluation of the northern portion of Padre Island National Seashore was initiated. No hazardous materials were observed and Park Officials were aware of no hazmat issues and reported the Park only sustained minor damage at the Bird Island Boat Ramp.

- Bravo Branch Houston is operational with Warren Zehner and Matt Tilimon as Deputy. Approximately 80 responders reported to the operations briefing.
- During this operational period, Hazard Evaluation Teams (20) conducted assessments in Lincoln County and Chamber County. Identified 40 targets. HE Assessment Status: 90% complete in Lincoln County, Chamber County 30%, Austin 10%. All other counties in Branch Bravo 0%.
- Air Recon conducted aerial overflight of Austin County and Colorado County to assess flooding extent and pollution. Identified 7 targets.

- Discharge Monitoring Teams (3). DA 3 oversaw fuel transfer. 10 facilities discharge targets closed out.
- Branch Staffing: 52 personnel in field. Daytime ops only.
- Two USCG Liaison Officers and Planning personnel include EPA and EPA START have integrated into the Bravo Branch.
- ARKEMA: Unified Command agreed precautionary plan to introduce a temporary cooling option to protect the ambient temperature organic peroxide within Arkema's building 21 was completed at 1530. At this time 4 tons of dry ice placed inside the bays storing the peroxide within the building is most practical and efficient approach. Again, the material has a very high SADT and does not pose and imminent threat of decomposing but as a precaution and in concurrence with UC the RP proceeded with the temporary cooling option. The UC has stand down and demobed form the operations center. The Harris County Health Department and the Harris County Pollution Control and coordinating with Arkema any health inquiries that could come form the nearby community. As part of the UC, EPA is demobing form the incident.
- ASPECT: Aspect continues to conduct assessment of the Houston area.

Figure One. Zones Five and Six.



Figure Two shows locations where ASPECT has conducted chemical monitoring in Harris County to date. To date, there have been no confirmed detections over primary targets which are wastewater and drinking water treatment facilities. ASPECT is expected to fly in the Alpha Branch on September 4, 2017.

Figure Two. ASPECT monitoring locations in Harris County.



CHARLIE BRANCH

- EPA has secured an operational staging area in the parking lot of the Central Mall, adjacent to the U.S. Coast Guard (USCG) Marine Safety Unit (MSU) in Port Arthur. Two EPA OSCs are mobilizing from Houston tomorrow along with GIS/Data Support. Currently, most of the area is still inaccessible due to flooding. EPA will continue to coordinate with local, state and federal response partners to plan for further assessment and potential response actions once the flood waters recede. The priority for the next operational period is to set up command posts with work space and continue developing an operational structure to begin field operations.
- During this operational period, the Charlie branch's Hazard Evaluation teams assessed the Neches Park, Sabine Pass, and Sabine. High water prevents ground ops at this time. The 2nd Hazard Evaluation team visited Motiva. Motiva has no power and is shut down. This team also contacted and confirmed that the Colonial Pipeline is still non-operational.
- Teams conducted assessment with 4 Hazardous Evaluation teams and identified 10 + targets for reassessment.

3. Participating Agencies

- Texas Commission on Environmental Quality
- Texas General Land Office
- Texas Parks and Wildlife
- 6th Civil Support Team
- US Environmental Protection Agency
- US Coast Guard
- National Oceanic and Atmospheric Agency

4. Personnel on Site

i croomici on one						
Agency	ICP	Alpha Branch	Bravo Branch	Charlie Branch*	Austin	
		Dianch				
US EPA	15	2	16	3	10	
USCG	9	22	30	1	1	
TCEQ	2	5	31			
TGLO	6	2	4			
CST	8	9				
Contractors	11	6	5			

^{*}Charlie Branch is continuing the process of being staffed.



